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# **A Qualitatively-Driven Approach to Mixed Method Research**

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## **Chapter Objectives:**

- To understand the meaning of qualitatively-driven inquiry and what this is in the context of mixed methods research
- To consider why methods may be mixed using a qualitatively-driven approach
- To distinguish qualitatively-driven mixed methods and multimethods approaches
- To identify some reasons for using qualitatively-driven mixed methods or multimethods approaches
- To define some templates for qualitatively-driven mixed methods and multimethods approach designs
- To understand how qualitatively-driven mixed methods and multimethods approach designs can be used in research
- To consider the contribution of qualitatively-driven mixed methods and multimethods research to the field of mixed methods research

## **Keywords:**

Mixed methods, multimethods, qualitatively-driven approach

*I love listening to people. It is labor-intensive work. It's not the easiest work to do in terms of time, but I consider the stories that I hear from people gifts that I get from them...I think one of the really important mandates of sociology, for me, is the idea of giving voice to the experiences of people whose voices and experiences might otherwise not be heard, marginalized, or shunted off to the side. And I'm trying to bring their voices and experiences to center stage, you might say... It's an instance of what, I think, C.W. Mills meant when he talked about "translating private troubles into public issues" – David Karp, Ph.D. Sociologist [private communication]*

Sociologist David Karp's work on depression and mental illness (Karp, 1996) captures the essence of this chapter. Karp's research approach seeks to fully engage with his participants via in-depth interviews. His goal is to understand the lived experiences of what it is like to live with depression and mental illness. He aims to give voice to what is subjective and varied. There is not one "truth" out there, but multiple stories of the depression and mental illness experience. Karp carefully listens and also reflects on what it is his participants are saying to him. In doing so, he takes a qualitatively-driven approach to his work; one that privileges the exploration of the process of human meaning-making.

In Karp's work on depression, he uses quantitative research as an auxiliary component to his primary qualitative methodology as a means of both understanding the broader "objective" context of depression (rates of depression in the wider population, wider sociological variables that have been known to correlate with depression statistically) and contextualizing his qualitative

research on people's "experiences" of depression. After surveying the almost exclusively "positivist" or "clinical" research literature on depression, Karp came to the conclusion that a qualitatively-driven approach was vitally needed.

### **What is Qualitatively-Driven Inquiry?**

A "qualitatively-driven approach," is used here as an "umbrella term" that encompasses several theoretical traditions. All of these approaches have the common core assumption that social reality is constructed and that subjective meaning is a critical component of knowledge building. A qualitative tradition recognizes the importance of the subjective human creation of meaning but doesn't always reject outright some notion of objectivity. As Crabtree and Miller (1999) state: "Pluralism, not relativism, is stressed, with focus on the circular dynamic tension of subject and object" (p. 10).

There are theoretical variations among qualitatively-driven approaches and various theorists have categorized these variations in somewhat different ways. This chapter will deploy Denzin and Lincoln's (1998) three category cluster of variations in qualitative research approaches. The first variation is a *constructivist or interpretative* approach. This approach assumes social reality is subjective, consisting of narratives or meanings constructed/co-constructed by individuals and others within a specific social context.

A second qualitatively driven variation, critical *theory*, is especially focused on how power, control and ideology create dominate understandings of social reality. Critical theorists center on the *power* dynamics generated by a set of meanings (ideologies) about individuals' social reality and lived experiences. An example of this approach comes from *postmodernist* research, which questions the very foundation of what "social reality" is. A postmodern perspective centers its focus on the how social life is produced and privileged by those in power with the goal of "emancipating" and uncovering social injustice,<sup>1</sup> Reality for the postmodernist then, is "representational" rather than "real" or "true."

A third variation are *feminist perspectives* that center knowledge building by focusing on the lived experiences of women and other marginalized groups with the goal of accessing and highlighting subjugated knowledges. Feminist perspectives, such as *feminist standpoint theory*, are aware of the hegemonic biases of traditional positivistic concerns, especially as they pertain to issues of "objectivity" within the research process whereby individuals must place their own values and concerns outside the research endeavor. For the feminist researcher, there is no knowledge that is without bias. There is no view from "nowhere;" knowledge itself is imbued with the power and authority of those who seek it. They point to the longstanding androcentric

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<sup>1</sup>. Some variations on this paradigm are said to include Marxist, feminist, ethnic, cultural and queer studies. Denzin and Lincoln pose a separate paradigm for these variations they term "materialist-realist ontology" (Denzin and Lincoln, 2000, p. 21).

(male) bias of early knowledge building, especially as practiced by early positivists, which often left out the concerns and issues of women as well as issues of difference in terms of race, class, ethnicity, and sexual preference in their research problems and analyses. The issues of those whose lives have been “subjugated” by traditional research is now “foregrounded in feminist perspectives. There is a push to address and reorient male-centered bias in the research process.

Table 1 captures some of the general differences between a qualitatively-driven and a quantitatively-driven approach. It’s important to note that these differences lie along a continuum.

We have avoided the creation of a binary between these two types of methodological approaches. As we move toward the center of the continuum, we may in fact witness how these perspectives can share a standpoint on some of the major dimensions that are said to differentiate both approaches. For example, while we have listed that the overall type of analysis plan for a qualitatively-driven project is to generate theory, qualitative approaches to research can also test ideas generated from the ongoing collection of qualitative data. In this example, there is an interdependent relationship between data collection and data analysis, such that the qualitatively-driven researcher seeks to “test out” new ideas generated from their data throughout the entire qualitatively-driven analytical process.

	<div> Subjective <span>←————→</span> Objective </div>	
	Qualitatively-Driven	Quantitatively-Driven
Ontology: What is the nature of the reality?	Social reality is multiple	There is a concrete social world “out there.”

<b>Epistemology: What can we know and who can know?</b>	Goal is to understanding multiple subjectivities. Individuals are the “experts.” Through inter-subjectivity we understand human behaviors. There is no definitive subject-object split in knowledge building.	Goal is to ascertain “the truth” in order to predict and even uncover “laws” of human behavior through objective social inquiry. Scientists are the experts.
<b>Types of Questions:</b>	The purpose of this research is to understand (“the what”, “the how” and “the why”)	Statement of relationship between independent and dependent variable. Question phrased in terns of an hypothesis
<b>Type of Data Collected:</b>	Naturalistic Settings: Participant-observation (fieldwork) In-depth Interviews Focus Groups Unobtrusive Data: Documents	Surveys Experiments: Randomized Controlled Trials (RCTs) Systematic reviews/meta-analyses
<b>Type of Analysis:</b>	Inductive: Goal is to generate theory. Looks for general themes/patterns in the data. Uses “thick description.” Compares and contrasts thematic data. Specific Types of Analyses examples: Grounded theory, narrative analysis	Deductive: Test out hypothesis. Explain variation in the “independent variables” by controlling the “dependent variables.” Stress is on statistical measurement
<b>Goal is to:</b>	Get at and understand a “process”	Generalize, predict and control research outcomes

Table 1: Qualitatively-driven and Quantitatively-driven approaches compared on several key research dimensions along a subjective-objective continuum

### What is a Qualitatively-Driven Approach to Mixed Methods Research?

An important dimension that characterizes a qualitatively-driven mixed methods project is a commitment to privileging a *qualitative approach* (in the form of a qualitatively driven epistemology and methodology) that forms the *core* of the overall mixed methods research project with the quantitative approach and method taking on a *secondary role* in the mixed methods design. The role of the secondary or auxiliary method is to *ask a sub-question or or set of sub-questions that assist in the elaboration or clarification of overall core qualitatively-driven research question/s*. Within a qualitatively-driven mixed methods study the core method is always qualitative and is depicted in all caps (QUAL) and the quantitative component of the mixed methods project is depicted in lower case letters (quan). There remain contested areas with regard to whether or not the secondary component in fact can form a separate study by itself. Some mixed methods researchers note that to engage in a qualitatively-driven design means that the secondary component cannot stand on its own as a separate study (see Morse and Niehaus, 2009; Morse, 2010; see also Morse, this volume).

Qualitatively-driven approaches offer a range of insights into the on-going discussion of mixed methods research, especially as it relates to arguments concerning the mixing of research paradigms, issues of power, and authority inside and outside the research process. There is a *transformative* quality to many of these perspectives in that they speak to social justice and social change as primary research objectives. Qualitatively-driven praxis promotes a deep listening between the researcher and the researched in order to get at “deeper and more genuine expressions of beliefs and values that emerge through dialogue [and] foster a more accurate description of views held” (Howe, 2004, p. 54). Additionally, qualitatively-driven approaches tend to be open to new information-less confirmatory (hypothesis testing) than exploratory and theory-generating. In



fact, the process of qualitatively building knowledge is *iterative*, meaning that the researchers test out (in a much less formal manner) their analytical ideas as they continue to analyze, memo about, and collect more data in a process known in grounded theory as “analytical induction” (see Charmaz, 2006).

In this chapter we do not necessarily draw a sharp boundary around the ultimate contribution of the quantitative secondary component’s role in a qualitatively-driven mixed methods design. Rather it is seen as lying along a continuum where at one end the secondary study cannot stand on its own, and at the other it borders on making a contribution to the core qualitative component, but may also be complete in itself. The results from the quantitative component may be useful in specific research contexts and whilst being secondary in one qualitatively-driven study, may also be published separately as an independent study. The results may also be used and linked to yet another type of mixed methods design where they play a more primary role and so on.

### **Reasons for Mixing Methods from a Qualitatively-Driven Approach**

There are a range of different reasons why a researcher might want to deploy a qualitatively-driven mixed methods research design that directly stems from the type of theoretical perspective (methodology) that links a qualitatively-driven research problem with a particular method or set of methods. It’s important to note that *methods are tools*; a researcher’s *methodology determines the way in which a tool will be utilized*. The rationale for mixing methods must be tightly linked to one’s methodology and the questions that emanate from this perspective. The important thing to also note when working with a qualitatively-driven set of

methodologies is that *it may be difficult* for the researcher to state upfront the exact mixed design they will ultimately utilize as it is often the case with a qualitatively-driven design that the overall research process is *iterative*, which means it is on-going and the researcher is led by the data to ask yet another set of questions that call for a particular type of method and so on. Locking ones mixed methods project into a particular mixed methods design template a priori may be difficult when doing research from a qualitatively-driven standpoint.

One thing that should also be noted here is that a qualitatively-driven project may call on a second qualitative method as its auxiliary component: the second qualitative method would take on a secondary role (qual) in the service of a primary QUAL method. The addition of a second qualitative method would serve a supplementary function in that it answers a different question, but its primary aim is to *support the core qualitatively driven approach and question*. This qualitatively-driven design would be called a *multi-method design* by its use of *two different qualitative methods*. This contrasts to pluralism in qualitative research in which qualitative methods are combined as they are in multi-method designs but there is more flexibility about the status of the methods used (see e.g. Frost et al, 2010; 2011). Depending on the reason for their introduction to the study and the stage within the research process at which the decision is made to use additional qualitative methods, each qualitative method may be afforded equal, adjunct or greater status in its use to address a research question or (evolving set of research questions).

The nature of qualitatively-driven mixed projects means that some general reasons for qualitatively-driven researchers to utilize a mixed methods research design can be discerned, and these will be considered in the next section

## **Reasons for Selecting a Qualitatively-Driven Mixed Methods or Multimethods Research Design.<sup>2</sup>**

There are a number of reasons why a qualitatively-driven researcher would utilize a mixed methods or multimethods project. These always relate to researchers' qualitatively-driven approaches to the social world and the set of questions that specifically emanate from these perspectives.

- ◆ *The qualitatively-driven researcher may use a quantitative study first with the goal of obtaining a representative qualitative sample, for the purpose of enhancing their qualitative findings.*

Conducting a quantitative demographic survey on a random sample of the researcher's target population first, *followed by a qualitative study*, enables the researcher to select a qualitative sub-sample from this population that is representative of the target population.

- ◆ *The qualitatively-driven researcher may use a quantitative study first to enhance the generalizability of a qualitative study.*

The researcher uses findings from the quantitative study to select a qualitative sample that is reflective of the wider population in order to more readily generalize from in-depth research

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<sup>2</sup> Some of these reasons are adapted from Hesse-Biber (2010a) and Morse (2010).

findings. This is especially the case where the researcher samples directly from the quantitative sample - in this way both studies are directly linked.

- ◆ *The qualitatively-driven researcher may employ a quantitative method first in order to cast a wider net, with the goal of identifying a specific population of interest that may be hard to locate (purposive sampling).*

For example, the researcher is interested in the lived experiences of BRCA positive mutation males finds it difficult to secure a large enough sample to interview. By first conducting a general health survey, a researcher might be able to locate a sub-sample for a follow-up set of intensive qualitative interviews, which in fact is the main motivation for their conducting the survey itself.

- ◆ *The qualitatively-driven researcher may use a quantitative study first to assist in defining a population of interest based on specific research findings gathered from their quantitative study.*

For example, the researcher is interested in conducting a survey of employers' attitudes toward the female workers. As a result of the findings from the quantitative study, they note the high degree of stereotyping of the female workers, especially with regard to issues of race. On the basis of these findings they may decide to subsequently conduct an in-depth study to explore employers' stereotypical attitudes, by focusing specifically on employers working in male-dominated occupations. The focus of qualitative inquiry is sparked directly from the surveys findings.

- ◆ *The qualitatively-driven researcher conducts a quantitative study first to provide options for enhancing the validity and reliability of qualitative findings as well as the exploration of contradictory results found between the quantitative and qualitative studies.*

By linking the qualitative with the quantitative at the data gathering stage (that is, the researcher draws a qualitative sample directly from the quantitative sample first collected), the researcher is provided with the possibility of assessing the validity and reliability of their qualitative findings. For example, those qualitative researchers who ask similar questions in both the quantitative and qualitative study are provided with an opportunity to grapple with issues of reliability, validity, and contradiction of research findings by ascertaining (1) the extent to which research findings from similar questions yield similar responses (reliability) and (2) the extent to which their responses appear to get at the same underlying issues, such that there is general agreement in their responses (triangulation with the goal of increasing the validity of a study).

- ◆ *The qualitatively-driven researcher may decide to conduct a concurrent study with the quan embedded or nested in the QUAL to develop a more robust understanding of the qualitative results by integrating quantitative findings from a set of closed-ended questions embedded in the QUAL.*

Quantitative data that are gathered may answer a different question but the findings are in service of the core qualitatively driven approach. At the analysis stage, the findings from both these studies are in conversation with one another with the quantitative component adding richness/understanding to the core qualitatively driven component. So for example, qualitatively-driven researchers may juxtapose the findings from the quantitative component to *help understand the core (qualitatively driven) findings from the QUAL component. The quan*

*component's findings* are used to explore the range of disparate findings they may discover in their QUAL component in order to generate new questions and explore these differences in order to gain a more complex understanding of their research problem.

◆ *Serendipitous use of quantitative findings: case of outliers:*

A quantitative study may reveal the presence of a sub population of “outliers” in the initial quan study, which provides an opportunity to expand knowledge regarding the overall research problem and/or generates new problem questions that require exploration in a QUAL approach follow-up research project.

◆ *Purposeful use of quantitative findings:*

In this case, the qualitatively-driven researcher deliberately uses a quantitative component as a way to generate new qualitative research questions. Mixed methods can assist researchers in acquiring specific topical issues and concerns they wish to explore. Here, the quantitative component serves to initiate or spark new hypotheses or research questions that researchers can pursue in-depth.

◆ *Serendipitous use of juxtaposing quan and QUAL findings:*

An originally parallel mixed methods design (one quan and one QUAL study conducted simultaneously) is expanded to include a follow up qualitative study that explores disparate findings between the qualitative and quantitative findings with the aim of generating new questions that can be explored qualitatively thereby permitting a more complex understanding of

a research problem.

◆ *Qualitative theory testing:*

Following up with a quantitative study is done in order to test the validity of qualitative findings on a wider population. The researcher conducts a qualitative study first, followed by a quantitative study in order to “test out” the theoretical ideas generated from their qualitative study. In this case, the researcher is interested in ascertaining whether their theoretical ideas and findings are generalized to a larger population.

◆ *The qualitatively-driven researcher may want to get a more comprehensive understanding of a phenomenon from the differing perspectives of those involved in said phenomenon.*

The researcher uses a QUAL core component, and supplements this by gathering secondary qual datasets regarding particular aspects of the phenomenon from the differing perspectives of people that are involved with the same experience. The findings from the auxiliary qual component cannot be understood outside of the context of the core QUAL component (QUAL-qual). For example, students may recall differently from what a teacher says about the positives and negatives of their coursework when receiving verbal feedback. The researcher could record the verbal feedback session between the teacher and the student, and analyse the content of what the teacher said. The researcher could then interview the student later on in the day asking them what was said/what happened in the feedback session. These interviews seek to gather particular aspects of information, and are only interpretable in the context of the core component.

- ◆ *Alternatively, the researcher may want to develop a more rounded understanding/theoretical framework by comparing and contrasting two independent datasets.*

The researcher starts with a QUAL component, whereby through the analysis process, issues specific to each independent group are identified. The researcher then develops secondary qual components to address and further explore these issues, proceeding to compare and contrast them. For example, a researcher wants to understand how single men and single women respectively experience the adoption process. The researcher could conduct semi-structured interviews (QUAL), and through the analysis, identify issues that are specific to the single men group, and issues that are specific to the single women group. The researcher could then conduct a few semi-structured interviews (qual) with each group, with the specific view to compare and contrast these datasets.

- ◆ *The qualitatively-driven researcher may want to explore changes in participants after they experience a certain phenomenon without having to wait for a long time while the experience takes place.*

The researcher would use a before and after design with different participants who share a similar experience. The researcher could conduct the secondary qual component with the 'before' participants and the primary QUAL component with the 'after' participants.

For example, a researcher wants to understand how undergoing a year long job placement may change students' views of potential careers in their chosen subject area. They may conduct a few



semi-structured interviews (qual) to understand students' perspectives on potential careers before they go on their placement ('before' group). The researcher may also conduct a larger number of semi-structured interviews (QUAL) with students who have completed their year long job placement to explore their views of potential careers ('after' group), without having to wait for a year until the 'before' group have undergone this experience.

◆ *Serendipitous use of qualitative findings:*

A QUAL-qual design may not always be the intention of the researcher at the start of the project, but may be implemented iteratively to complete a project when unexpected findings leave an important point unanswered in relation to the main research question.

The researcher may have started the project with the intention of conducting a single method qualitative study but comes across unexpected findings in the analysis which need further exploration in order to answer the main research question. They may supplement their qualitative study with a secondary qualitative method which is specifically designed to address the unanswered point. The design of the project then becomes QUAL-qual, and the findings of the secondary component are interpreted in the context of the core component.

Similarly, the initial intention of the researcher may be to conduct a single method qualitative study but may decide later on to supplement this as a result of unexpected interesting findings which may warrant further exploration. The supplementary method specifically focuses on these unexpectedly interesting findings, and feeds back into the main research question.

- ◆ The *qualitatively-driven researcher may want to gain insight into the multiple layers the experiencing of a phenomenon may have.*

The researcher uses several qualitative methods where they all play an equal role, or one may play a greater role than the other. This would depend on the research question, the reason for their inclusion, and the stage at which they are included into the project.

For example, a researcher may want to explore how mothers make the transition to second-time motherhood, where the second child has been labelled with a disability by conducting semi-structured interviews. These interviews may be analysed using structural narrative analysis, which seeks to give understanding on *how* a story is told. The researcher may then analyse the same interview data by using a thematic narrative analysis, which seeks to provide insight into narratives which do not follow the conventional story form and permits for deeper inspection by exploring *what* is said.

Overall, multimethod designs may also particularly suit when there is a lack of clarity of the theoretical framework, and when exploring areas that have not received much attention, or have not received any attention thus far.

### **A Qualitatively-Driven Approach to Mixed Methods Research Design**

We inductively derived a set of mixed methods design “templates” that are based on the reasons qualitatively driven researchers might want to mixed methods. These templates, however, do not cover all the variety of reasons or the range of mixed methods designs a qualitatively driven researcher might select from. These templates should be thought of as working models of mixed methods designs that can/should be tweaked or added to, and some components may need

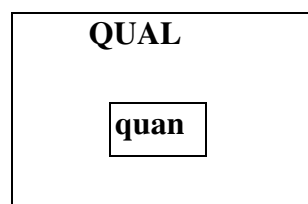
to be deleted, depending on the particular research problem or set of problems that emerge during the course of the research project. We advocate this “iterative approach” to mixed methods design, given that the nature of a qualitative approach to research is often subject to change as the research project proceeds and alters its course in response to new research findings, which in turn may prompt new research questions along the way.

### **Some suggested Qualitatively-Driven Mixed Methods Templates**

**In the following section, we will describe examples of mixed methods designs that a qualitatively-driven researcher might find useful to deploy, given their specific research goals. The important thing to note is that all these designs are in the service of answering core qualitatively-driven research questions, with the quantitative component (quan) taking on a “secondary role” in assisting the qualitatively-driven component’s research goals.**

### **Nested/Embedded Mixed Methods Designs**

A qualitatively-driven mixed methods embedded/nested design consist of the concurrent mixing of qualitative and quantitative methods carried out as separate studies within the same research project, with the qualitative component taking a core/dominant role. In this particular instance, the qualitatively-driven researcher may be motivated to make use of this type of design in order to gather some descriptive quantitative information, such as demographic statistics of the population that they study, in order to place the findings from their qualitative study into a larger context (see Figure 1).



### Figure 1: Qualitatively-driven nested/embedded mixed method design

What is important to note when undertaking this type of design is that a researcher who favors the qualitative data tends to not engage directly with the quantitative data; the quantitative component is often used to supplement a primarily qualitatively-driven approach to a project. The synergy between the two data sets is not usually present. Data is not mixed at any stage of the research process except perhaps at the writing stage, where quantitative methods are mentioned as a backdrop to the dominant qualitative findings.

While this design has limited opportunities for integration at data analysis and interpretation points in the research process, a parallel design may still offer the researcher some opportunities for more direct engagement of data sets by having the researcher engage in reflexivity regarding how their quantitative findings may raise new questions that are connected in some substantive way to their research problem, rather than using the quantitative data a-theoretically. For instance, the researcher might seek out points of connection, guided by their original research question, at both the data analysis as well as data interpretation stages, by consciously comparing and contrasting the research findings from both data sets. More often than not, however, the non-connection of these different data points usually serves to underscore the divide between the two methods, not their potential synergistic connection.

### **Qualitatively-Driven Sequential Mixed Method Designs.**

There are several types of qualitatively-driven sequential mixed methods designs, but the overall commonality these designs have is that the quantitative study (quan) is in the service of the dominant qualitative (QUAL) component. The studies are sequential in that one study follows and builds on the next. The first of these sequential designs is as follows:

**QUAL • quan • Findings & Interpretation**

The qualitatively-driven sequential design in figure sees the qualitative component first in the study followed by the quantitative component second and taking on a secondary/ assisting role. There are a number of scenarios that one can imagine emanating from this type of design. In one scenario, the quantitative results assist in the interpretation of the major qualitative findings. A secondary function of the quantitative component would be to “test out” some of the theories generated by the dominant qualitative findings. One might also imagine that the quantitative component might also be utilized as a way to generalize results from the qualitative study to a wider population. What is common to all of these reasons is the centering of the quantitative component’s findings with the qualitative component used to enhance and elaborate these findings to a wider population.

**Qualitatively-driven sequential iterative design.**

We might take this first qualitatively driven sequential-model and extend it through time, given the iterative nature of qualitatively-driven research. Picking up on the idea that a quantitative component is used in the service of the qualitative in that it “tests out” ideas generated from the qualitative component, we can then extend the qualitatively-driven sequential model through time, generating a more qualitatively-driven sequential iterative design whereby theory

generated from the qualitative component is tested out on a representative population and findings are compared and then, if needed, the theory is revised and tested out again in an on-going process of theory generation and testing in a series of “wave” studies (see Figure 2).

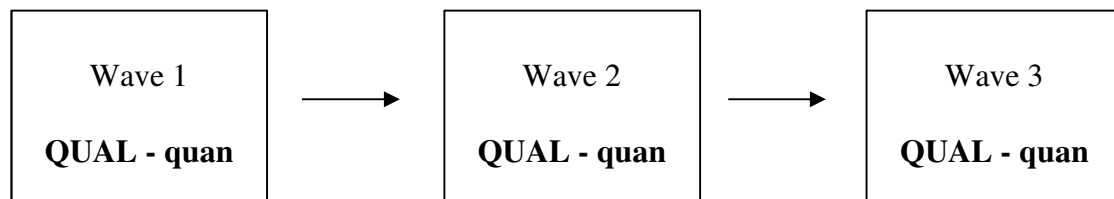


Figure 2: Qualitatively-driven sequential iterative mixed method design

### **Qualitatively-driven sequential mixed methods designs that get at subjugated knowledges.**

Sometimes a researcher taking a qualitative approach uses a sequential design in order to find out more about their target sample or to obtain a more representative sample for further in-depth investigation of the research problem. In this case, starting the sequential study with the *quantitative component* is done with the goal of generalizing and validating the dominant qualitative study, by obtaining a more representative sample or getting at a “hard to find” sample as input for the dominant qualitative study that follows.

Researchers can also integrate the data from both studies in this explanatory mixed methods design at the data interpretation stage by allowing for the comparison of research findings, especially if the two studies have utilized similar questions of interest to the research question. This would serve to increase the validity of the qualitative results and potentially provide a more complex understanding of qualitative results where there is an apparent contradiction. Findings from each study may interact at the data analysis and interpretation stage by comparing and contrasting findings with the goal of perhaps generalizing qualitative findings to different samples, and/or validating QUAL findings by comparing findings from similar questions asked in quan and QUAL study.

### **Quan • QUAL • Findings & Interpretation**

#### **Some suggested qualitatively-driven multimethods templates**

In this section we describe examples of multimethod designs that may be of use to researchers depending upon their research questions. Similarly to qualitatively-driven mixed method designs, multimethod designs consists of a primary QUAL component, which is served by a secondary qual component in order to address the research goals.

#### **Multimethod simultaneous design**

A qualitatively-driven multimethod simultaneous design is comprised of two components that occur at the same time. The supplementary qual component takes place at the same time as the primary QUAL component as follows:

### **QUAL + qual • Findings & Interpretation**

This design usually consists of two separate datasets, which may or may not originate from two separate groups of participants, depending on the research question, and on the availability of participants. The data also tend to be analysed separately, with the results from the auxiliary secondary component supplementing the results from the primary component.

There are various reasons why this type of multimethod design might be used. One particular reason may be that the secondary qual component provides a second and different perspective to that offered through the sole use of the primary QUAL component. Another particular reason may be that the secondary qual component can be analysed at a different level (e.g.: micro level) to the level in which the primary QUAL component is analysed (e.g.: macro level).

### **Multimethod sequential design**

A qualitatively-driven multimethod sequential design consists of two separate studies where the subsequent secondary qual component ensues and develops from the primary QUAL component as follows:

#### **QUAL • qual • Findings & Interpretation**

This design is usually composed of two separate datasets, although this is not always the case as we will see in one of the multimethod case studies presented in the next section. It also normally consists of different participants and different methods to data collection. The core QUAL component of the overall study is carried out first, including data collection and analysis. This then serves the secondary qual component, which builds upon the findings of the primary component in its method of data collection and analysis.

Again, there are several reasons why this type of multimethod design may be used. It may be to obtain different perspectives or to obtain a more detailed and comprehensive perspective of



a particular phenomenon. The secondary qual component may also be used to test the findings from the primary QUAL component.

### **Qualitatively-Driven Mixed Methods and Multimethods Case Studies<sup>3</sup>**

We present several examples of qualitatively-driven mixed methods and multimethods research studies. In the analysis of each study, we are guided by several sensitizing questions that you might ask yourself when contemplating a mixed methods/multimethods study from a qualitatively-driven perspective, and that you also might think about when utilizing these mixed methods design.

- How does the mixed research design further the goals of a qualitatively-driven approach to understanding social reality? How can a mixed methods design further the goals of a qualitative approach to understanding social reality?
- Why and how do qualitative researchers employ mixed methods across the research process at (a) the data gathering stage, (b) the data analysis stage, and (c) the qualitative stage?
- What are some of the challenges these researchers confront?
- What are the missed opportunities to further knowledge building and why?
- What are the particular strengths of combining methods with respect to a qualitatively-driven perspective?

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<sup>3</sup> Case studies 1 and 3 are adapted from: Hesse-Biber (2010b).

### **Mixed Method Case Study 1: *Understanding Rape Culture.***

Sarah McMahon (2007) explores the subculture of college student athletes, and sought to understand the meaning, role, and salience of rape myths that exist within college cultures.. She utilized a qualitatively-driven mixed methods design that allows her to get at the subjugated knowledge contained within rape cultures. Prior research into this topic tended to over-reliance on quantitative measures to the detriment of getting at students' lived understandings of rape.

McMahon reasoned that a qualitatively driven design would allow her to more fully "capture the essence of rape myths that may not materialize through the use of quantitative surveys" (p. 358).

Her end goal was to give voice to students' concerns and views about rape. A secondary aim tied to and dependent on the first study goals, was compare what students said on a survey versus what they talk about in a more open-ended conversation with their peers and one on one with an interviewer. Toward the beginning of her project, McMahon sought confirmation of the quantitative (survey) results and qualitative (focus groups and individual interviews) findings. However, once her study was underway, she became increasingly skeptical of this aim, doubting whether her quantitative and qualitative findings would ever mesh with one another.

McMahon's sequential qualitatively-driven mixed methods design (see Figure 3) started out with a survey (quan) consisting of 205 sophomore and junior student athletes at one northeast public university. The survey asked participants to fill out a number of quantitative attitudinal scales -- "Identification of Acquaintance Rape Attitudes Scale" that identifies acquaintance rape attitudes, as well as the "Marlowe-Crowne Social Desirability Scale" that indicated participant response

bias. The statistical findings from the survey revealed a very low acceptance of rape myths among the student survey population. However, the survey data also showed a higher acceptance of violence among men and individuals who did not know a survivor of sexual assault.

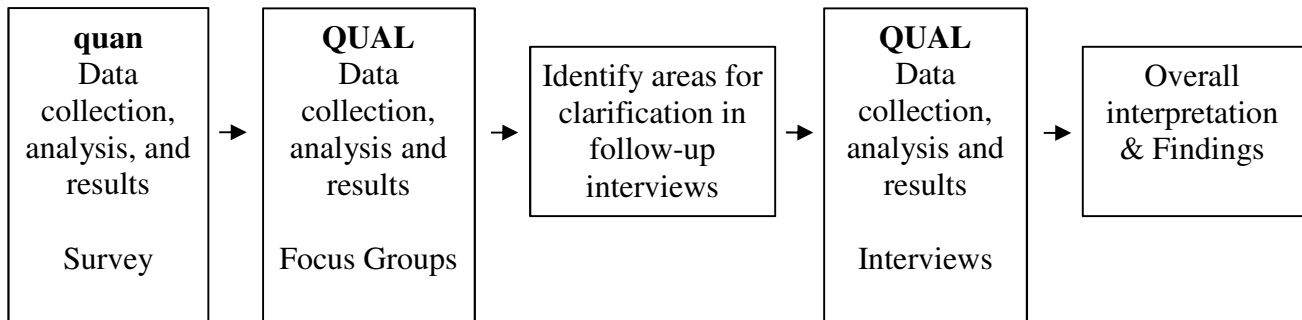


Figure 3: McMahon's sequential qualitatively-driven mixed methods design

The qualitative (QUAL) phase of her study consisted of focus groups followed by semi-structured interviews. Data collection was facilitated by someone of the same gender as the participants (p. 360). Focus group questions were developed by McMahon in conjunction with student athletes in the campus peer education program and university staff that serve victims of sexual violence. Individual interviews were conducted in order to elaborate on themes McMahon discovered in the focus groups and in order to determine any differences in students' responses between situations (i.e, group setting vs. individual). The interview guide was designed specifically to address focus group topics that needed "more in-depth exploration" or clarification (p. 361).

The qualitative findings from the focus groups and individual qualitative interviews revealed "subtle yet pervasive rape myths" that fell into four major themes: "the misunderstanding

of consent, the belief in 'accidental' and fabricated rape, the contention that some women provoke rape, and the invulnerability of female athletes" (p. 363). McMahon found that the survey findings contradicted what she found via the focus group and individual interview data. The survey's findings revealed a "low acceptance of rape myths...was contradicted by the findings of the focus groups and individual interviews, which indicated the presence of subtle rape myths" (p. 362).

McMahon explained this by affirming the quality of qualitative data with regard to the answers provided in the qualitative components of her research project. McMahon wrote: "further exploration revealed myriad subtle, yet powerful, beliefs that there are certain situations in which violence is acceptable, unintentional, or the fault of the victim. The simple statement that 'no means no' disguises a range of more subtle rape-supportive beliefs" (p. 366). This qualitative aspect revealed the subtle nuances of each individual answer, thereby allowing for rape-supportive beliefs to be exposed in her research.

McMahon's qualitatively-driven mixed methods design use reveal the opinions of respondents may shift based on the type of research methods deployed.. The survey data consisted of closed-ended questions that limited the breadth of participants' answers. By employing a qualitative component, the research participant was able to not only answer the specific questions they were asked during the focus group and interview component, but were also given an opportunity to elaborate on their feelings more comprehensively. For example,

many of the participants answered the survey in such a way that the researcher concluded the majority of respondents felt that sexual coercion was wrong under all circumstances. During the interviews however, many of the participants generally believed that rape was wrong, but that the victim was also partly to blame, thereby leading to a partial contradiction of the quantitative findings. McMahon elaborates on this point further by noting: "The skewed results of the survey indicate that most of the participants believed that sexual violence is wrong, and they largely disagreed with many of the victim-blaming statements. However, once the same types of questions were posed in a group setting where the student athletes interacted with their teammates, a different set of responses were provided that included more rape-supportive attitudes and victim-blaming beliefs" (p. 366).

McMahon's qualitatively-driven research design allowed her to get at subjugated knowledge that lies buried beneath the dominant college discourse on rape culture. As McMahon notes: "Further exploration revealed myriad subtle, yet powerful, beliefs that there are certain situations in which violence is acceptable, unintentional, or the fault of the victim. The simple statement that "no means no" disguises a range of more subtle rape-supportive beliefs" (p. 366).

### **Mixed Method Case Study 2: Enhancing the Validity of Clinical Trials by Uncovering Subjugated Knowledges.**

Paterniti et al. (2005) designed a qualitatively-driven mixed methods sequential study. Their overarching goal was to get at subjugated knowledge concern Asian Americans and their

caretakers lived experiences with cancer clinical trials. The impetus for their study was the overall low accrual rates in clinical trials, particularly among people of color due to “the history of both research atrocities and clinical atrocities, as well as general disparities in healthcare” (p. 3016). These factors contribute to lower access among minority populations to novel and potentially life-saving cancer therapies.

The researchers in an effort to expand the diversity of their research study partnered with a number of organizations in California to access and increase their target population of clinical trial users. What is interesting to note about the narrative given by the researchers concerning their data collection design is that they first start off with an informal qualitative component (QUAL) that consisted of members from their the organizational partnerships they created with several oncology and cancer information associations with the goal of enhancing the survey design as well as working on a plan for distributing surveys to a more diverse group of cancer patients and their caretakers in oncology-based clinical settings. . The purpose of this design was to strengthen the face validity of the survey instrument. The data gathered from these organizational members consisted of “monthly steering committee meetings to direct the course of survey design and distribution as well as to give direction regarding the face validity and feasibility of the instrument” (p.3016). In addition data was collected (QUAL) from ten cancer patients recruited from their target population who provided feedback on a pilot version of the survey instrument. So the first component consisted of the following qualitatively driven design

#### **QUAL + QUAL • quan • Interpretation & Findings**

The second part of the study consisted of using their validated survey and administering it

to their target population through the partnership networks created during patient visits to their oncology clinic. The quantitative survey aimed (QUAN) to assess cancer patients and their caretakers' lived experiences with clinical trials and trial reimbursement (n=1187). A QUAL observational study was also added to the design and its purpose was to carefully examine the clinical trial recruitment process itself. The observation study consisted of a purposive sampling of cancer patients who were said to be eligible for a cancer clinical trial and their caretakers. This sampling procedure allowed the researchers to obtain a diverse sample of clinical trial participants. The sample ranged in age from 19 to 85 years with a mean age of 63 years. The gender distribution was skewed with 75% of the sample male. Racial/ethnic difference sample breakdown showed that 59% were white; 5% were Asian; 5% were African, Latino, or Native America, while 22% were not identified for race/ethnicity. The design for this phase of the study consisted of the following concurrent design:

#### **QUAN + QUAL • Findings and Interpretation.**

The researchers immersed themselves in the recruitment process and took detailed field notes of the interactions they observed in the clinical trial accrual process. They noted the ethnic identity and other personal information they could garner such as the gender age and occupation of patients, based on medical reports from physicians (not medical records). They used a grounded theory to analyze their field observations which covered a total of 56 hours over 9 months). The results among Asian-American respondents were compared to non-Asian respondents.

Through an analysis of both the quantitative and qualitative data, Paterniti et al. found a number of interesting findings about disparities among Asian-American respondents. Asian-American respondents were less likely to have heard the term "clinical trial" and less likely to

have participated or known someone who had participated in a trial, but were more likely to understand trial reimbursement factors (pp. 3018-9). Non-white respondents overall were much less likely to even report being willing to participate in a clinical trial. These quantitative findings helped to place the dominant qualitative findings into a wider clinical perspective on clinical trials with regard to minority participation.

The grounded theory analysis of the qualitative data resulted in the identification of five stages in patient recruitment: (1) presentation of potential participants, among whom Asian Americans tended to be younger and have made direct requests for participation; (2) information about trial and therapies; (3) identifying criteria for participation, both among doctors and between doctors, patients and caregivers, which often presented a challenge for those who were old enough but whose stage of disease progression was too far for trial consideration; and (4) specifying parameters for the trial, which none of the Asian patients met in order to advance to the stage of (5) administering cancer therapies.

Using a qualitatively-driven mixed methods approach allowed Paterniti et al. to gather a broad base sample from their quantitative survey that then allows them to place their in-depth observations from minority and non-minority experiences, focusing on the experiences of Asian participants into a broader demographic context. Although the data only represents a geographically and otherwise restricted sample that is not generalizable to different/larger populations, this study was unique in its mixed methods approach and provides an important look at patient recruitment in clinical trials. Paterniti et al. recommend more education campaigns at the community level to raise awareness about clinical trials and recruitment campaigns to increase trial diversity.



### **Mixed Method Case Study 3: Fostering Social Change for Women: Studying Gender Inequality in the Workplace.**

Louise Marie Roth's research, *Selling Women Short: Gender and Money on Wall Street* (2006), addresses the issue of gender inequality in the workplace. Roth wanted to understand the "structural factors" within the workplace setting that may contribute to the gender wage gap and its persistence overtime. She studies successful female Wall Street MBAs, whose credentials make them on par with their male counterparts. These women have equivalent "human capital"<sup>4</sup> qualifications and, like their male counterparts, were hired at high-ranking Wall Street securities firms as their first jobs.

Roth deploys a mixed methods nested design that nested her quantitative closed-ended questions into primarily qualitative in-depth interviews (see Figure 4). Her cohort convenience sample consisted of 76 men and women who had completed their MBAs in 1991, 1992, or 1993 and subsequently worked on Wall Street (however some of her, participants may or may not have been still working on Wall Street at the time of their interview). Roth conducted her interviews between 1998-1999 asking questions that addressed women's "career history from before the MBA until the time of the interview" (p. 203). Her interview protocol was a semi-structured format that also contained closed-ended and open-ended questions (to elicit quantitative and qualitative data, respectively).

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<sup>4</sup> The term *human capital* refers to those dimensions that affect one's ability to produce on the job-factors such as educational level, number of years worked, job training, absenteeism, and turnover.

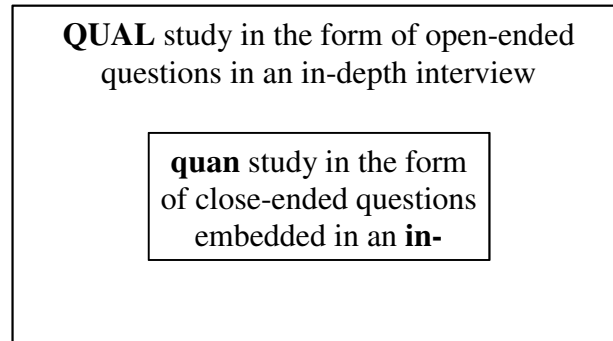


Figure 4. Roth's mixed methods nested design.

Roth's qualitative component study contained open-ended questions that queried male and female participants about their everyday lived experiences in their workplace. Her questions were designed to give Roth a broader understanding of the potential ways in which the workplace environment worked to generate gendered inequities. The quantitative component was nested in the qualitative allowed Roth to track respondents' wages overtime, along with other

specific career conditions-job changes, salary information (including bonuses), and reports on their “performance evaluations” carried out by their employers.

A quantitative and qualitative analyses of her data were carried out. The statistical analysis of the quantitative data allowed Roth to take into account all those factors that might legitimately explain gendered differences in wages such as number of hours worked, any human capital differences, and so on. Her quantitative analysis revealed the presence of a significant gender gap in wages that remained unexplained even when controlling for any legitimate factors that might otherwise make a legitimate difference.

While her quantitative findings revealed the extent of the wage gap and provided a numerical understanding of the gap, it was only when the qualitative data was brought into dialogue with her quantitative findings that Roth was able to gain a fuller and more complex understanding of the specific processes within the workplace that might have contributed to the gender gap in wages. A grounded theory analysis of participants’ stories regarding their lived experiences at work allowed Roth to get at subjugated knowledge of the inner workings of the workplace environment. Performing a grounded theory analysis also allows Roth to explain the gendered wage gap’s persistence over time despite the general climate on Wall Street in the early 1990’s being one of growing opportunities for women’s advancement.

By listening to men and women’s voices, Roth is able to provide a picture of structural discrimination in the workplace began to emerge. These are the unarticulated and even unconscious practices and actions of employers that insure and perpetuate the gender gap in wages. Roth notes:

On Wall Street, these interpersonal and organizational dynamics occur through a bonus system where pay supposedly reflects performance. Despite a supposed basis in individual merit, this variable pay system not only coexists with gender inequality between workers in the same jobs, it can even help reproduce this inequality (p. 10).

Roth's qualitatively-driven approach allows her to unearth her participants' lived experiences over time to reveal the hidden inner structures of the workplace that consist of discriminatory organizational practices with regard to decision-making in performance evaluations that are tightly tied to wage increases and promotion.

It is through dialoguing with her findings from her mixed methods nested design that allowed Roth to pinpoint how macro differences among men and women's wages are connected to specific organizational practices. Roth's qualitative data exposed the hidden aspects of the organizational climate that promoted employers' "taste for discrimination." Just as some women may choose certain jobs that fit a traditional image of appropriate work for women, employers are also influenced by these cultural images. Employers choose male or female workers because they seek traits believed to be masculine or feminine, regardless of whether specific women or men possess such traits. So, to some extent, women's labor-market situation is a result of employers' "irrational preferences" (Becker, 1957). Roth's qualitatively-driven approach allows her to truly delve underneath the surface and explore the experiences of her participants. Roth's aim was not to ask for a convergence of results, but rather to be comfortable residing on multiple levels and in

multiple realities that inform one another. By focusing on the policies and practices of Wall Street securities firms, Roth helped us better understand the macro processes that tend to confine women to jobs characterized by low wages, little mobility, and limited prestige. This approach blames the structure instead of the victim and suggests a different strategy for improving women's labor force status. It is by going under the surface of things that social change can be implemented.

#### **Mixed Method Case Study 4: Unwritten Rules of Talking to Doctors about Depression: Integrating Qualitative and Quantitative Methods.**

Wittink, Barg, and Gallo (2006) wanted to assess whether there were discrepancies between doctors' and their patients' perspectives on depression by exploring the patients' views about interactions with their doctor. They focused on older patients who identified as being depressed. Wittink, Barg, and Gallo chose a qualitatively-driven mixed method design so that they could "link the themes regarding how patients talk to their physicians with personal characteristics and standard measures of distress" (p. 303), thus allowing them to both test hypotheses and to generate hypotheses.

They drew their sample from a parent study whose goal was to illustrate how patients aged 65 and older report depression in primary care. Purposively recruited from this larger study, 48 participants were selected because they had identified as being depressed, and their doctors had also rated them for depression.

Wittink, Barg, and Gallo employed a qualitatively-driven simultaneous mixed methods design (see Figure 5). It was qualitatively-driven as the emphasis was in exploring and seeking to

understand the patients' views about how they interact with their doctor and whether this influences how they communicate about depression. They used a variety of quantitative measures (quan): the "Center for Epidemiologic Studies Depression" scales which looks at depression in community samples; the "Beck Anxiety Inventory" which measures the severity of anxiety symptoms; the "Beck Hopelessness Scale" which assesses factors related to suicidal thoughts; the "Medical Outcomes Study" which is assesses health; and the "Mini-Mental State Examination" scales which measures cognition and global functioning, as well as personal characteristics. These measures were used "to examine selected factors that have been associated with recognition of depression in primary care settings" (p.303), and were administered to the patient participants. Further, the patients' doctors were also given the "Physician Evaluation of the Patient at the Index Visit" which rated the patients' levels of depression and how well the doctor knows the patient. Semi-structured interviews (QUAL) were also carried out with the patients to explore their views about interactions with their doctor.

The analysis was conducted in two separate quan and QUAL phases. In the first quan phase, Wittink, Barg, and Gallo identified two groups – those who identified as being depressed while their doctors did not rate them as being depressed (discordant group), and those who identified as being depressed while their doctors did rate them as being depressed (concordant group). The personal characteristics of both groups were compared and tested for significance

using t-tests. In the second QUAL phase, they iteratively coded and developed themes with regards to patients' communication with their doctors. During this stage of the analytical process, the researchers did not have access to the quantitative data or results.

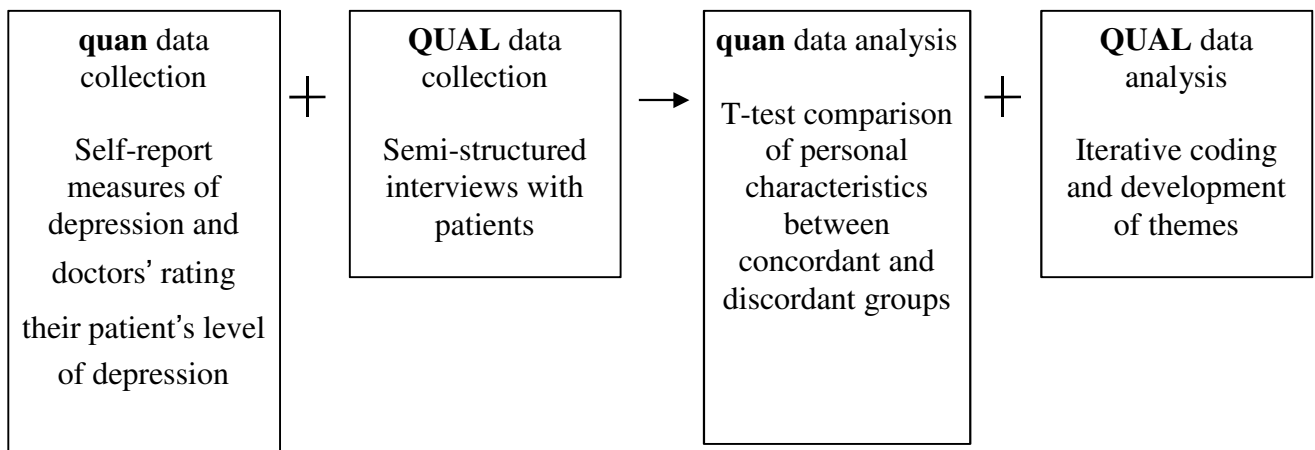


Figure 5. Wittink, Barg, and Gallo's qualitatively-driven simultaneous mixed methods design.

The quantitative (quan) analysis showed that there were no significant differences in personal characteristics apart from age between the discordant group and the concordant group. The qualitative (QUAL) analysis revealed four major themes which “relate to the patients' perception

of the relationship with their physician” (p. 305): “My doctor just picked it up;” “I’m a good patient;” “They just check out your heart and things,” and “They’ll just send you to a psychiatrist.”

Wittink, Barg, and Gallo then compared the themes generated from the QUAL analysis across the computed quan scores and found that patients who discussed the “My doctor just picks it up” theme and the “They’ll just send you to a psychiatrist” theme were rated as being depressed by the doctor. These quan and QUAL findings show that patients identified as being depressed are influenced in their interactions with their doctors by the manner in which doctors indicate how emotional issues will be addressed.

Using a qualitatively-driven simultaneous mixed methods design permitted both hypothesis testing and hypothesis generating in a single study. This is a good example of how the secondary quan component enhances the primary QUAL findings: by identifying patients who are depressed and whether or not their doctors also rate them as being depressed provides context for understanding how depressed patients are influenced by their perception of their interaction with their doctors. These findings are of importance and have clinical implications with regards to “the ability of doctors to recognise depression and negotiate a treatment plan” (p. 308). Conversely, had Wittink, Barg, and Gallo conducted a solely quantitative study, they would have missed the patients’ perspectives, which was the part of the study that contributed to the understanding of the interactions around depression between the patients and their doctors.

### **Multimethod Case Study 5: Draw-and-Tell Conversations with Children about Fear.**



Martha Driessnack (2006) set out to introduce a child-centred approach to conducting research with children, focusing on children's experiences of fear. Driessnack highlights that children have typically been researched by using measures that focus on adult-centred approaches, such as through traditional measures like questionnaires, surveys and so on. However, these measures may no longer be necessarily appropriate when child research shifts to focus on researching from children themselves, instead of about children. Therefore, Driessnack chose a qualitatively-driven multimethod design with the intention of empowering the children she was researching with regards to the researcher and the research context. She did so by choosing the child-centred approach of draw-and-tell conversation as it is a part of everyday life for children – children are offered the opportunity to draw and this then facilitates a conversation where narratives are elicited. Children construct stories of personal events in a manner that empowers them rather than the researcher.

Purposively and criterion based, Driessnack recruited 22 child participants through a school where there was a broad demographic range, and so as to have access to children who are in their typical daily environment. Participants were between 7 and 8 years of age; an age where although their grasp of verbal skills is still limited, children are still capable of constructing stories of personal events. Driessnack provided a range of drawing materials from which the children could choose to use, and asked each child to “think about a time when he or she was most afraid, draw it, and, when finished with the drawing, tell me all about it” (p.1419).

Driessnack employed a sequential qualitatively-driven multimethod design (See Figure 6). She used a linguistic approach to narrative analysis (QUAL) for analysis of narrative structure to

consider *how* children shared their experiences of fear. Once this was complete within and across all 22 conversations, she returned to the children's narratives to examine *what* the children had shared about their experiences of fear by using thematic analysis (qual).

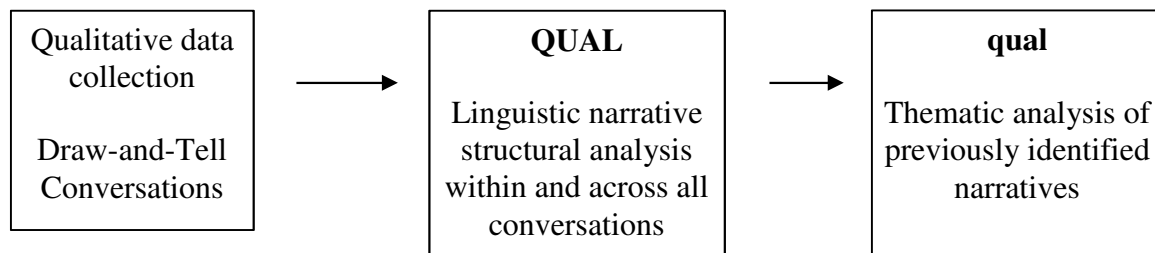


Figure 6. Driessnack's exploratory sequential qualitatively-driven multimethod design

The qualitative findings of the linguistic narrative structural analysis revealed that the children's stories about fear were told in a manner which provided a lot of orienting detail about who is present in the story, locations, time, ongoing/looming events, but where the children rarely notably featured themselves. The children also provided evaluations of their stories by emphasizing what did not take place and what did not seem to right. The analysis also revealed a notable lack of resolution, or ending, to the children's narratives, and that these were mostly told in the present tense as opposed to the past tense. This QUAL analysis highlighted that the fear may still be present and unresolved, and that as an emotion, fear is "known or experienced only as it remains unresolved" (p. 1428).

The qualitative findings of the ensuing thematic analysis applied to the identified narratives revealed five themes “that emerged and united the stories around feelings of being alone and taken off guard or by surprise, being unable to help themselves or obtain help from others, and the experience or sense of impending doom” (p. 1428). This qual analysis highlighted the necessary circumstances for an experience to be considered as fearful by children.

Driessnack’s study is a good example of how a qualitatively-driven multimethod QUAL-qual design increased the depth and extent of the analysis - the secondary qual component added to the primary QUAL component. Whilst the core component identified certain structures in *how* the children told stories about their experiences of fear, the auxiliary component revealed *what* the children said in their narratives about fear experiences.

#### **Multimethod Case Study 6: Staff Nurse Perceptions of a Healing Environment.**

Lincoln and Johnson (2009) wanted to explore the process of integrating into practice a holistic nursing model at a particular health organisation, and to understand what the characteristics of a healing environment are from the viewpoint of a staff nurse. Lincoln and Johnson chose a qualitatively-driven multimethod interview process as this “provided an opportunity for candid discussion and deliberation” (p. 183). They viewed and defined the use of qualitatively-driven multimethod by making use of two different data types (individual and group interviews), and also by using two types of investigators to carry out their research (academic researchers and nurse researchers).

Lincoln and Johnson recruited 7 staff nurse participants from a group of nurses that were on a particular medical surgical unit as this unit had a diverse patient population. No other participant details are offered. They carried out an unstructured qualitative individual interview (QUAL) with a staff nurse participant, with the view to provide “a rich contextual framework that informed the subsequent interviews (p. 184). This individual interview was followed by two separate group interviews sessions (qual), which consisted of two participants and four participants respectively, with the aim to elaborate on the information obtained from the individual interview. Two nurse researchers, without any direct supervisory or responsibility of the nurse participants, carried out the data collection process. Lincoln and Johnson’s reason for using staff nurse researchers with staff nurse participants was “to support researcher rigour” (p. 185), although they do not elaborate further on the meaning of this. The role of the first nurse researcher within the interview process was to ask the questions whilst the second nurse researcher observed the nonverbal responses of the participants. However, both academic researchers and nurse researchers were involved in the analysis and interpretation process of the interview data. Lincoln and Johnson’s sequential qualitatively-driven multimethod design to data collection can be seen in Figure 7.

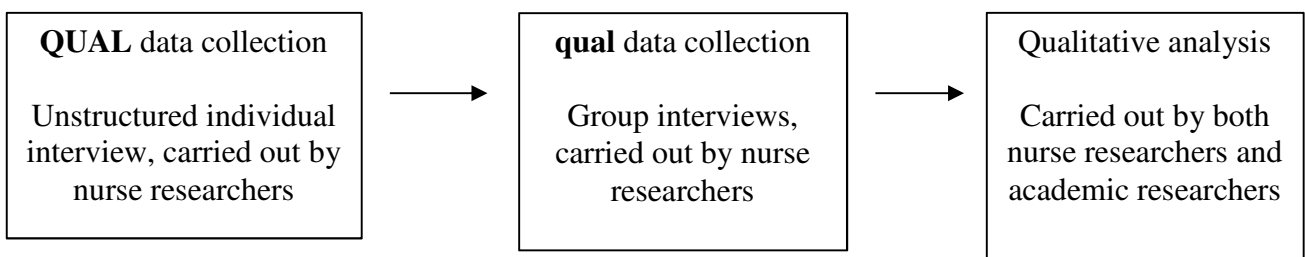


Figure 7: Lincoln and Johnson’s sequential qualitatively-driven multimethod design

The analysis of both the QUAL component and the qual component were not separated, and as such, the findings were reported together in one section. The findings of the qualitative analysis resulted in three categories: intrapersonal qualities and interpersonal qualities along with the extrapersonal context of the work environment summarized the influence of the integration of a holistic nursing model into practice. Each category revealed three major themes within which captured the nature of such a healing environment from the perspective of staff nurses: the context, the connections, and the calling of healing within nursing.

Using a qualitatively-driven multimethod process to both data collection and investigators allowed Lincoln and Johnson to generate more detailed views about their particular research questions in a manner that supported researcher rigour. The use of the secondary qual component (group interviews) amplified the information acquired from the primary QUAL component (individual interview) and utilised multiple types of researchers. Their study is a good example of how the focus of a qualitatively-driven multimethod QUAL-qual design can be employed to a different aspect of the research process to increase depth and rigor.

### **Closing Thoughts and Future Directions**

Qualitatively-Driven mixed methods designs offer the mixed methods research community a set of methodological approaches that center the importance of a qualitative perspective, one that seeks to get at lived experience and often subjugated knowledge, with the goal of also working toward issues of social justice and social transformation. Such a view does not seek to upend or diminish the benefits of a more quantitatively-driven approach, but is meant to push against earlier mixed methods research practices that leaned toward a more positivist

mixed methods orientation, without reflecting on the broader role that a qualitative approach might bring to a variety of research questions. These earlier mixed methods designs primarily viewed the qualitative component in the role of “handmaiden” or “second best” to the more dominant quantitative component. This praxis led some in the mixed methods community to critique such practices as tending towards reducing qualitative research to a set of auxiliary techniques for variously supplementing, humanizing, or illustrating a primarily “expert” quantitative research design (Giddings, 2006; Giddings & Grant, 2007). Brannen (2005) noted that the most frequent design among sequential mixed methods studies placed the qualitative component in a secondary role, “where qualitative pilot work is likely to precede and be subservient to a larger survey” (p. 15). Bryman’s (2006; 2007) content analysis study of mixed methods research articles and interviews with mixed methods researchers noted the dominance of the quantitative component in most mixed methods designs, as well as a lack of integrating research findings using different methods.

Qualitatively-driven approaches to mixed methods enable research focused on questions that seek access to unique perspectives on experience. They foreground questions and methods that seek to highlight the dynamism and complexity of experience, and enable research designs to be tailored to explore the topic of inquiry in greater depth than one approach or traditional mixed methods research alone do. While we have pointed out the important contributions a quantitative component can bring to a qualitatively-driven mixed methods project it is critical that researchers be clear on the reasons for the inclusion of a quantitative component. This is also true for the addition of a secondary qualitative component. As with all mixed methods designs, qualitatively-

driven designs must clearly show the aims that these approaches are addressing. These may be in addition to aims met by uniparadigmatic quantitative or qualitative components of the study.

The practice of mixed methods social science should be informed by an awareness of the goal of using a combined approach. It may be the case that adding on a quantitative method to a qualitative project does *not* move our theoretical understanding of a given issue forward. Instead it highlights directions in which future research can do and offers ways of approaching this. The researcher must be willing to be reflective and ask whether adding a quantitative methods to a primarily qualitatively-driven project, will serve to enhance qualitative understanding or not. In addition, pursuing a qualitatively-driven mixed methods or multimethods design also requires new research skills and resources, and here it behooves the researcher to begin to question the extent to which they may need to *retool their research skills or approach their project with a team of differently-skilled researchers*. The team route to mixed methods does not come without its own set of issues in terms of coordinating how the findings, if at all, are integrated (Bryman, 2007; Leech, 2010). Bringing together researchers who view data with different worldviews may mean that some are drawn only to their preferred approach, having less faith in other approaches and biasing the reporting of findings accordingly. Others may simply not have training or understanding in other approaches and may struggle to see the value of them. Clearly setting out the design and the status of each method to be used at the outset of the study, and allowing for the introduction of new methods as the research evolves may be particularly important in qualitatively-driven mixed methods and multimethods research. One of the advantages of placing qualitative methods to the fore is the creativity in exploring information that it allows for. As with uniparadigmatic qualitative research, the qualitatively driven mixed methods research

approach flexes with the unfolding of the data and its findings, thus recognizing more deeply the complexity of experience and understanding.

Qualitative methods are often brought to mixed methods research to 'repopulate' it. That is to reflect the relationships between researcher and researched so as to allow for issues such as race, class and gender to be illuminated rather than obscured in universalizing understandings. Qualitatively-driven mixed methods research capitalizes on the reflexive aspect of conducting research by explicitly attending to and making prominent these relationships. This, combined with clear theoretically informed qualitatively-driven research designs, enables outcomes that are transparent in the ways they have been reached and that are credible in their status. The value of combining the more objective quantitative approaches allows for such findings to be considered in different contexts and their wider implications to be evaluated.

The range of qualitatively driven mixed methods designs that this chapter has discussed illustrates not only the myriad of ways in which mixed methods research has evolved but also the variety of applications to which it can be put. The field of research is opened up so that human experience is valued and recognized whilst the scientific approach that they bring makes this approach credible and trustworthy. The approaches share a common premise that places the research question central to the inquiry whilst also recognizing the need for rigorous choice of methodology and employment of methods. The potential for qualitatively-driven mixed methods and multimethods research to advance understanding of human experience, support, relationships and interaction is huge and invokes responsibility amongst researchers to consider carefully not only what they are researching but how they are doing so and what their role in the process is.



### **Discussion Questions:**

- How does qualitatively driven mixed methods and multimethods research differ to traditional mixed methods research?
- What differences are there between qualitatively driven mixed methods and multimethods approach designs?
- What reasons are there for using qualitatively driven mixed methods or multimethods approach designs?
- Why might you choose a qualitatively driven mixed methods or multimethods approach?

### **Suggested Websites**

#### **Glossary of Mixed Methods Terms/Concepts**

<http://www.fiu.edu/~bridges/glossary.htm>

A list of terms and definitions adopted from Tashakkori and Teddlie's (2003) *Handbook of mixed methods in social and behavioral research*.

#### **Issues in Mixing Qualitative and Quantitative Approaches to Research**

<http://www.researchsupport.com.au/MMIssues.pdf>

This article examines the use of mixed methods and the resulting issues, including demands, paradigmatic problems, and lack of increased validity.

**The Network for Pluralism in Qualitative Research blog:**

<http://npqr.wordpress.com>.

This website provides interactive support, resources and information to researchers interested in combining qualitative methods with each other. It has a worldwide membership of over 200 researchers and offers a page for questions and answers from network members.

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